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**F02F 5/00****F16J 1/08****F16J 9/20**(21) Application number: **04354895**(71) Applicant: **MITSUBISHI HEAVY IND LTD**(22) Date of filing: **18.12.92**(72) Inventor: **HIRATA YUICHI**(54) **CYLINDER OIL INJECTION SYSTEM**

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(57) Abstract:

**PURPOSE:** To provide a cylinder oil injection system by which a strong lubricating film can be formed when sliding condition of a cylinder liner to a piston ring is most strict so as to extremely decrease abrasion between the cylinder liner and the piston ring.

**CONSTITUTION:** In the case of an internal combustion engine in which lubricating oil is injected to the sliding surfaces of a piston ring 1 and a cylinder liner, the piston ring having a gas tight type abutment 5 is provided with a cylinder oil residence chamber 3 inside of the piston ring, notches 2 formed by cutting the wall of cylinder oil stagnating chamber on the upper face of a piston ring, connecting holes 4 connected to the piston ring sliding surface from the cylinder oil stagnating chamber, a groove 6 in the peripheral direction connected to the communication, holes provided on the sliding surface of the piston ring, and a check valve and an accumulator provided in a cylinder oil injection oil passage.

